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Wright State University College of Engineering and Computer Science Bits and PCs newsletter, Volume 9, Number 9, November 1993

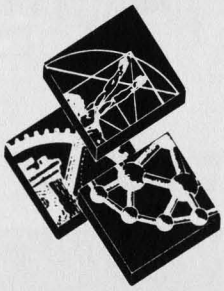
Wright State University College of Engineering and Computer Science

BITs & PCs

COLLEGE OF ENGINEERING AND COMPUTER SCIENCE

Nov. 1993 Wright State University Dayton, Ohio 45435 Vol. 9 No. 9

This newsletter is a monthly publication to inform students of the activities, news, opportunities and changes occurring in the College of Engineering and Computer Science. It reports on the achievements of faculty and students; changes in organization, policy and curriculum; scholarship and employment opportunities; and engineering and computer science student club activities. The newsletter is published by the College of Engineering and Computer Science and distributed to all engineering and computer science majors through their student mailboxes. The next issue will be published December 1. Submit items to be included in this issue to the College of Engineering and Computer Science office, 405 Russ Engineering Center, by November 22, 1993.



ENGINEERS
Turning Ideas Into Reality®

Next year's celebration of National Engineers Week (NEW) will take place the week of February 20, 1994.

Mark your calendar and plan to join in the activities!

National Engineers Week is the only nationwide celebration of the engineering profession. It was established by the National Society of Professional Engineers in 1951 and is always celebrated around George Washington's birthday. George Washington was the founder of the first U.S. engineering school at Valley Forge, Pennsylvania. This school later became the U.S. Military Academy at West Point, New York.

Our College Open House is scheduled for Monday, February 21, 2–7:00 p.m. The JETS/TEAMS Competition for area high school students will be held on the 17th of February in the Nutter Center.

Many activities, including the rubber-band powered model airplane contest are being planned for the celebration.

Engineering and Computer Science students who would like to volunteer to help with any of the activities, including serving as tour guides for Open House, contact Teri Shepherd, 405 Russ Engineering Center.

If you have any suggestions for new activities or events for this celebration, contact the Wright Engineering Council (WEC).

Your interest and suggestions are appreciated.

The Order of the Engineer, Inc., is an organization that seeks to promote professionalism among engineers and graduates of accredited engineering and college programs.

The next induction ceremony will be held on Friday, December 3 at 7:00 p.m. in the lobby of the Russ Engineering Center. Seniors, graduate students, alumni, and faculty are urged to keep this date open and plan to register to participate. Registration forms have been sent to student mailboxes.

For more information, contact the college office at 873-5001. **Registration deadline is November 19, 1993.**

NEW COURSE OFFERING

As a result of last year's Suggestion Program, a new course is being offered during winter quarter. EGR 199-01, *The Way Things Work*, is a 2.0 credit hour course that will meet Fridays from 1:00-5:00 p.m. This course will be taught by Dean Brandeberry.

While the course was created with our women engineering students in mind, it is open to all students and is designed to enable engineering students to overcome a fear of mechanical things and how they work.

The course will provide a hands-on, nuts and bolts experience that will allow students to gain confidence in their "hardware savvy."

For more information, contact the college office, room 405 RC.

NAECON '94 PRELIMINARY LAST CALL FOR PAPERS

"Technology for a Global Market"
May 23–27 – Dayton Convention Center, Dayton, Ohio

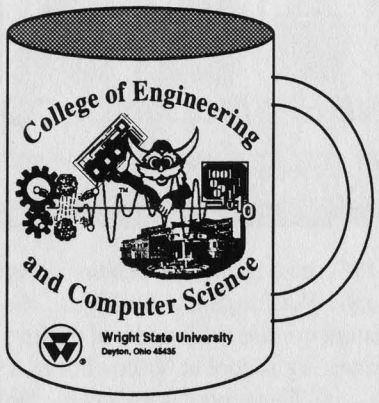
The National Aerospace and Electronics Conference is the most outstanding and senior national forum for the exchange of aerospace electronics information. Original, unclassified papers, which have not been previously published or presented, covering applications, research development and techniques in the subject areas listed below, are invited.

- Avionics Systems
- Command Control Communication and Intelligence
- Aircraft Platform/Subsystem Integration
- Radar
- Electronic Combat
- Modeling Simulation and Analysis
- Digital Communications/Networks
- Flight/Engine Control
- Navigation/Air Data/Reference Systems
- Pilot/Operator Vehicle Interface
- Machine Intelligence
- Software Development/Management
- Information Processing Technology
- Integrated Weapon System Management/Concurrent Engineering
- Defense Conversion/Dual Use Technology
- Manufacturing Technology
- Electro-Optical Systems
- Air Traffic Control
- Training Systems
- Enhanced Vision Systems
- Sensor Fusion
- International/Commercial Collaboration in Avionics R&D
- Fire Control

Abstract (300 words) submission date:
November 15, 1993.
Complete papers due: February 1, 1994.
Sponsored by:
The Institute of Electrical Electronic Engineers, Dayton Section
Aerospace and Electronic Systems Society
Send to:
NAECON '94
Don R. Gum, WL/FIGD
Ph.: 513/255-4690/Fax: 513/255-9746
or
Gary Thorpe, AFMC/MFC/SMRR
Ph.: 513/259-4465/Fax: 513/259-4881

College Mugs for Sale
$4.00

Available in Room 163 Russ Engineering Center



STUDENT RESEARCH POSITIONS

Electrical Engineering Major with C Programming Language

Simulation and real-time software development for the Systems Dynamics Laboratory.

The student shall simulate a space fabrication process using the IGRIP robot software simulation package; update the IGRIP simulation of rendezvous for the space platform; set up an Optotrak noncontact position tracker and integrate into the existing controller of the Utah/MIT Dextrous Hand; and program a neural net transformation that maps master to slave commands for teleoperation of the Utah/MIT Dextrous Hand and conduct experiments to measure performance improvement.

Materials Science Engineering Major with Computer Background

The student will assist in the kinetics of formation and growth of single phase beta grains during short time heat treatments of Ti-6A1-4V. For this purpose, salt pot heat treatments and subsequent optical metallography on thin samples will be conducted. The mechanism of alpha phase dissolution above the transus will be determined. Beta grain growth kinetics will be interpreted in terms of phenomenological models developed for conventional, longer time heat treatments. Student will test the effect of thermomechical processing variables on the development of microstructure. The effect of rolling parameters such as reduction per pass, number of passes, rolling temperature and rolling speed on dynamic and static recrystallization will be determined.

The student will be involved in fabrication of composite laminates, preparation of fatigue test specimens, monitoring experimental test matrix, failure inspection using scanning electron microscope, programming fatigue life prediction model and writing final report and presenting results.

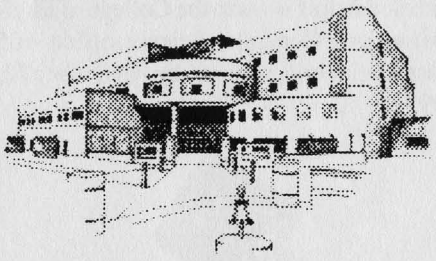
Salary range ($7.90 – $12.12/hr.)

Undergraduate to graduate student in good standing. U.S. Citizenship.

Call SOCHE Student Support Program
513/259-1375

In 1937, an American company built the very first auto-airplane combination. What was it called?

The Arrowbile



Fritz and Dolores Russ Engineering Center

Bits & PCs
College of Engineering and Computer Science
Wright State University

Dean
James E. Brandeberry, Ph.D., P.E.

Editor and Staff Writer
Sharon Coates

Submit questions, articles and ideas to Editor, 405 Russ Engineering Center. The College of Engineering and Computer Science reserves the right to edit all material for publication.

BECOMING REGISTERED AS A PROFESSIONAL ENGINEER

Now that you're about to get your engineering degree, why not take the next step toward becoming a true professional----registration.

Every state, the District of Columbia, and the U.S. territories have laws regulating the practice of professions including law, medicine, and engineering. These laws protect the public health, safety and welfare by insuring that those receiving licenses to practice have at least met certain requirements of competence, ability, experience, and character.

Registration is the mark of a professional. The registration process demands an extra measure of competence and dedication. While not all engineers find registration mandatory for their chosen career paths, the PE initials after their names can provide many advantages.

Registration laws vary from state to state and are exclusively under the control of the individual state legislatures. Generally the registration laws for professional engineers require graduation from an accredited engineering curriculum, followed by approximately four years of responsible engineering experience, and finally the successful completion of a written exam.

New engineering graduates needn't wait until they have four years of experience in order to start the registration process. Most state laws provide for a preregistration certificate for those who don't yet have four years of engineering experience. These are generally known as "Engineers-in-Training (EIT). The requirements for an EIT are usually graduation from an accredited engineering curriculum plus the successful completion of an examination on fundamental engineering subjects.

The EIT program is designed for new engineering graduates so they may begin the registration process while engineering subjects are still fresh in their minds. The certificate does not authorize the practice of engineering, but it does signify that the individual has successfully completed an exam in engineering fundamentals which is the first part of the examination process for full registration. After acquiring the necessary engineering experience, EIT's then need only complete the second portion of the exam–Principles and Practices–relating to their particular field of specialty.

Wright State University is offering the EIT examination on Saturday, April 16, 1994.

The deadline for students applying is February 14, 1994. (60 days prior to exam).

The deadline for applicants with a degree to apply is January 16, 1994 (90 days prior to the exam).

Application information can be obtained in the college office at 405 Russ Engineering Center.

The registration fee is $55.

EGR 499-05 (3 CR. HRS.)
Engineering Fundamentals
Winter Quarter 1994
Tuesday, Thursday
4:10 – 5:25 p.m.
146 RC

Dr. Giorgio McBeath, Assistant Dean, College of Engineering and Computer Science is the faculty advisor for the Ohio Society of Professional Engineers (OSPE) student chapter. For information on this organization or for additional information on becoming registered as a professional engineer, you may contact him in room 405 RC.

ATTENTION: EGR 499-05 STUDENTS

The student chapter of the Ohio Society of Professional Engineers (OSPE) will be selling the book that is used in EGR 499-05.

The book titled, ***Fundamentals of Engineering***, 4th Edition, by M.C. Potter, will be available at the end of fall quarter.

The cost will be less than bookstore prices. Interested students should contact David Dexter or Paul Niedermier at 873-5031.

ME WINTER QUARTER OFFERING

ME 499-05 (4.0 Credit Hours) Introduction to CAD/CAM will be offered during the winter quarter. The class will meet on Mondays and Wednesdays from 4:10-6:50 p.m.

This course is designed to introduce undergraduate students to the operational use of CAD/CAM by using a hands-on, applied approach. This will familiarize the student with modern methods of description, analysis, and numerically controlled manufacture.

Prerequisites are ME 201 or ME 202. This course can be used as a Technical Elective Type 2.

NEW COURSE OFFERING WINTER QUARTER

EGR 199-02 & 03 (1 credit hour course) Introduction to Engineering Experience is being offered during winter quarter, 1994. There will be two sections (15 students each) of this pass/fail course which will meet Fridays from 3:00 – 5:00 p.m.

The objective of the course is to provide "hands-on" engineering laboratory experience; knowledge of various engineering disciplines; and early contact with engineering and computer science students and faculty.

The following topics will be discussed: Robotics, Aerodynamics, Biomedical, Signal Processing, Computer Science, Human Factors, Vibration Analysis, Computer Graphics, Materials. Assistant Dean Giorgio McBeath will be the coordinator.

Club News

CLUB FAIR '93 was a HUGE SUCCESS.

The lobby of the Russ Engineering Center was filled with activity as the student clubs and organizations showed their displays and recruited new members. The displays were judged by Drs. Kenneth Cornelius (ME), Anthony Cacioppo (BHE), Robert Dixon (CSE), Raymond Siferd (EE), and Dean James Brandeberry.

This year's display winners were:

First Place ($100)

American Society of Mechanical Engineers (ASME)

Second Place ($50)

ASM International (ASM)

Third Place ($25)

Association for Computing Machinery (ACM)

Door prizes were won by the following:

$50 Book Store Gift Certificate
Clarence Garner

$25 Book Store Gift Certificate
Brian Miller

$10 Book Store Gift Certificate
Jason Evans

College T-Shirt
Jill Parrett

College Mug
Qamar Shafeek

AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)

ASME has T-shirts featuring the "Top Ten Reasons Why I Became an Engineer," These shirts are available in (L) and (XL) at a cost of $10 and can be purchased in room 209 RC.

If you are interested in joining ASME or would like more information about this student organization, contact Debby Denney, ASME President, room 209 RC.

UPDATE FROM THE DEAN

Representatives from ABET (Accreditation Board for Engineering Technology) arrived on October 24 and left on October 26. These visitors met with faculty, staff, and students in order to assess the quality of undergraduate engineering programs at Wright State University.

The team was composed of 9 members and was chaired by Sam Bowden of The MITRE Corporation. Five members of the team were faculty at other universities. Three members of the team were from industry and the ninth member of the team was Charles J. Neff, P.E., P.S., Chairman of the Ohio State Board of Registration.

At the exit interview with the president, the team discussed its findings relative to each of the engineering programs, but no statements were made regarding accreditation action which will occur next July.

The general comments of the team indicated that they believe we have a very good faculty, a very good student body, and outstanding laboratories and facilities.

Minor comments and suggestions were made about most of the programs and some of the support systems and services in the university.

The team spent a great amount of time reviewing the design experiences of our students and generally found the design experiences adequate.

The two programs which came under the most intensive review for design and received the most criticism were the mechanical engineering program and the materials science and engineering program.

In spite of all the criticisms made by the ABET Team, I believe we will fair quite well in the accreditation review and expect accreditation on all of our existing programs to be continued.

I also believe chances are very good that the Human Factors Engineering Program will be accredited as a result of this review cycle.

Special thanks to all the students who participated in meetings with the ABET visitors.

Your comments and suggestions, I am certain, helped us in the process to re-accredit our programs and to identify areas where we can improve.

GROUP STUDY SESSIONS

Mondays 7:30 – 9:30 p.m.
Room 148 RC

Calculus, Physics (240 Sequence)
Chemistry (121, 122)
Mechanical Engineering

Wednesdays 7:00 – 9:00 p.m.
Room 208 RC

Biomedical and Human Factors Engineering

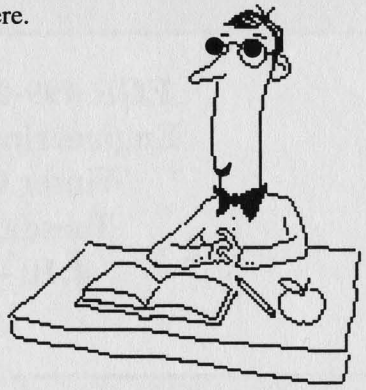
TO CHANGE OR NOT TO CHANGE... THAT IS THE QUESTION...

The first floor study lounge in the Russ Engineering Center may be undergoing some changes. The College of Engineering and Computer Science is leaving the decision in the hands of the students.

All engineering and computer science students will have the opportunity to vote on the nature of the use of the study lounge. Should it be a **QUIET** area or a **GROUP STUDY** area.

Both types of environments have advantages and disadvantages. However, if the students choose to make the lounge a group study area, the college will install a dry erase board for student use.

Be sure to stop by the study lounge and cast your vote. Ballots will be available there.



Ty D. Upp

Says. . . Don't forget to VOTE on the use of the study lounge. ***It's the right thing to do.*** *And no matter how the vote goes, please* ***DO YOUR PART*** *to keep this room TIDY!!*

College of Engineering and Computer Science
Student Clubs and Organizations
1993/1994

Amateur Radio Club (ARC)

Faculty Advisor:	Dick Rathbun	405 RC
President:	John Szkudlarek	O 143
Vice-President:	Jerry Hensley	E 467
Secretary:	Mellisa Hoppe	G 139
Treasurer:	Jerry Hensley	E 467

American Institute for Aeronautics and Astronautics (AIAA)

Faculty Advisor:	Dr. A. Faghri	121 RC

American Society of Mechanical Engineers (ASME)

Faculty Advisor:	Dr. J. Lieh	236 RC
President:	Debby Denney	V 598
Vice:President:	Santosh Mathilakath	U 603
Secretary:	Lynn Sloppy	G 626
Treasurer:	Mary Brickner	F 229

ASM- International

Faculty Advisor:	Dr. I. Weiss	127 RC

Association for Computing Machinery (ACM)

Faculty Advisor:	Charles Farnum	401 RC
·resident:	Andrea Witt	O 94
Vice-President:	Brain Kraack	H 254
Secretary:	Thanhia Paul	R 351
Treasurer:	Eric Burkhart	E 697

Biomedical Engineering Society (BMES)

Faculty Advisor:	Dr. D. Reynolds	206 RC

Human Factors Ergonomics Society (HFES)

Faculty Advisor:	Dr. A. Cacioppo	207 RC
President:	Gina Hillenbrand	B 633
Vice-President:	Tony Einarsson	E 564
Secretary:	Jason Morris	S 502
Treasurer:	Tom Lambert	E 143

Institute of Electrical and Electronics Engineers (IEEE)

Faculty Advisor:	Dr. Spalding	422 RC
President	Dotti Becker	S 745
Vice President	Debbie Costello	O 76
Secretary	Chet Hakanson	G 68
Treasurer	Brad Bernard	

Institute of Electrical and Electronics Engineers Computer Society (IEEECS)

Faculty Advisor:	Dr. Philip Chen	335 RC
President:	Merle Carr	M 356
Vice-President:	Todd Kniola	U 512
Secretary:	Jeff Dahney	E 734
Treasurer:	Robert Kaeser	E 684

National Society of Black Engineers (NSBE)

Faculty Advisor:	Dr. Giorgio McBeath	405 RC

Ohio Society of Professional Engineers (OSPE)

Faculty Advisor:	Dr. Giorgio McBeath	405 RC
President:	Jennifer Wilson	F 504
Vice-President:	David Dexter	I 215

Society of Women Engineers (SWE)

Faculty Advisor:	Dr. J. Gallimore	246 RC
President:	Andrea FeldmannG	173
Secretary:	Lisa Wurst	F 136
Treasurer:	Lynn Jackson	P 92

Student Government

Representative:	Sue Seitz	F 685

Tau Beta PI

Faculty Advisors:	Dr. J. Brandeberry	405 RC
	Dr. B. Rowley	247 RC
	Dr. R. Siferd	311 RC
	Dr. H. Lipsitt	132 RC
President:	Barry York	F 692
Vice-President:	Sanjeev Mehrotra	N 375
Corr. Sec:	Jason Crabtree	T 580
Recording Sec:	W. Jeff Reeder	K 322
Treasurer:	Robert Blackburn	E 505
Cataloger:	Alicia Woyton	P 500

Wright Engineering Council (WEC)

Faculty Advisor:	Dr. J. Brandeberry	405 RC
President:	Pat McWhorter	F 356
Director of Internal Affairs:	Lisa Wurst	F 136
Director of Finance:	Jen Reynolds	I 225
Director of Industrial Relations:	Paul Niedermier	G 29
Director of Publicity:	Barrie Timpe	F 260
Director of Engineering Activities:	Debbie Piorkowski	F112

IT'S NOT TOO LATE TO SIGN UP FOR MEMBERSHIP IN ONE OF THESE STUDENT ORGANIZATIONS!

STUDENT SUGGESTION PROGRAM

The Student Suggestion Program was initiated last year by James E. Brandeberry, Dean of the College of Engineering and Computer Science.

The purpose of this program is to solicit suggestions from students enrolled in the college about ways to improve the facilities and/or programs for engineering and computer science students.

A suggestion box has been installed in front of the Dean's Office, room 405 RC. Forms are available in the student club room, department offices, or student lounge. The program will run from October 1, 1993 through April 15, 1994. Give this some thought and turn in that bright idea.

Appropriate awards will be presented for the best suggestions.

NOTHING AMATEURISH ABOUT AMATEUR RADIO

ATTENTION everyone who expects to enter a future that is in some way affiliated with the discipline or study of engineering. Yes, that is probably you.

There is a little known hobby that can provide expertise, special knowledge, and connections that will help any future engineer to succeed.

Amateur Radio is a highly technical hobby that will give insight into the technology of the future. For example, imagine using a computer BBS in California without dialing the first phone or paying the first cent, or using one of the thirteen satellites in orbit that are strictly for amateur radio operators.

You can take advantage of this great opportunity by attending our meetings in 163 RC, the club room, on Thursdays at 7:30 p.m.

We invite all students to attend. You do not have to be a licensed amateur to experience the vast world that is available at the push of a button.

Please, come and realize the future of communications technology through amateur radio.

Jerry Hensley, WSU Amateur Radio Club

DID YOU KNOW that a search for better cannon linings led to the discovery of chromium's ability to generate an oxide coating?

In 1913 British metallurgist Harry Brearley noted that steel made of iron and chromium withstood attack by different chemical solutions. Knives formed from this steel did not rust, and thus was born the stainless steel industry.

By 1947 American factories were producing 14,000 tons of stainless pots and pans a year.

Inventors and Discovers

EMPLOYMENT OPPORTUNITIES

Mechanical Engineer Duties: creating finite element computer models for automotive components and structurally analyzing them using the finite element method; programming using numerical techniques of the finite element method in the field of structural dynamic analysis; using a pre/post processor finite element modeling and analysis program in finding effective properties of laminated composites; analyzing composite laminate for failure, delamination and stress/strain states; and developing computer programs for computer simulation using computer graphics, including library routines.

Duties will be performed using a UNIX based computer operating system.

Requirements: Masters in mechanical engineering. Must have 3 graduate courses in FEA, 1 of which included using a commercially available FEA program; 2 graduate courses in composites, 1 of which included analyzing composite laminate for failure, delamination, stress/strain states, lamination theory, interlaminar stresses, fracture mechanics and thermal hygrothermal effects; 1 graduate course in CAD which includes AutoCad and programming BASIC and FORTRAN; 1 graduate course in continuum mechanics including computer algebra system, REDUCE; and 1 graduate course in thermal conduction, fluid dynamics and system modeling.

$39,000/yr. 40 hr/wk.

Resumes to 7310 Woodward Avenue, Room 415, Detroit, MI 48202.

Reference No. 62393.

Senior Application Engineer. To perform design optimization of light patterns using statistical optimization techniques to pass photometric requirements for various automotive lighting devices. Design optimization using Total Quality Engineering and finite element analysis method on various automotive components using PRIME/PDGS and NASTRAN, PATRAN and/or DYNA 3D for computation of linear and nonlinear responses in static and dynamic analysis. Perform co-relations studies between analytical and test results using specific software like LMS/LINK to better relate static and dynamic behavior of transmission components for various loading conditions.

Required: M.S. in Operations Management or Mechanical Engineering. Must have masters level courses, 1 each in: Design and Analysis of Experiments; Management Science; Quality Assurance; Advanced Operations Management; and masters thesis in Design Optimization using Statistical Techniques.

Undergraduate courses: 2 each in Finite Element Method; Design Projects; and 1 course in Experimental Stress Analysis.

40 hrs/wk; 8:00 a.m. – 5:00 p.m.; $38,000/year.

Send resume to 7310 Woodward Avenue, Room 415, Detroit, MI 48202.

Reference No. 62093.

IT'S A FACT: **Gourmet ice creams like Haagen-Dazs and Ben & Jerry's are loaded with grease. A one-cup serving has as much artery-clogging saturated fat as 1/4 cup of lard. Choose an ice milk like Breyers Light and you'll cut the fat by 75 percent. Buy Sealtest Free or Edy's or Dreyer's Fat Free and you'll get rid of almost all the fat.**

Nutrition Action Healthletter

FACULTY FACTS

Soon M. Chung (CSE) published the following: "Enhanced Tree Quorum Algorithm for Replica Control in Distributed Database Systems," **Journal of Data and Knowledge Engineering,** North-Holland. ➢

Venu Dasigi (CSE) had the following articles accepted for publication in the **International Journal of Intelligent Systems:** "Logical Form Generation as Abduction, Part I: Representation of Linguistic Knowledge" and "Logical Form Generation as Abduction, Part II: A Dual-Route Parsimonious Covering Approach." ➢

David Fautheree, Fiscal Affairs, received funding in the amount of $4,100 from the Miami Valley Research Institute for his proposal entitled, "Artificial Intelligence Applications Training." ➢

Ping He (BHE) received funding in the amount of $116,420 from the National Institute on Disabled and Rehabilitative Research for his proposal entitled, "Field-Initiated Research/Prosthetic Socket Design." ➢

Marian Kazimierczuk (EE) published the following papers:

"Phase-controlled Series-parallel Resonant Converter," IEEE Trans. Power Electronics, Vol. PE-8, pp. 309-319, July 1993 (co-author D. Czarkowski).

"Phase-modulated Series-parallel Resonant Converter with Series Load," IEE Proceedings, Pt. B, Electric Power Applications, Vol. 140, pp. 297-306, September, 1993 (co-author M.K. Jutty).

"Comparison of the Efficiencies of the Class D and Class E Rectifiers," 36th IEEE Midwest Symposium on Circuits and Systems, Detroit, MI, August, 1993 (co-author A. Reatti).

"Application of the Principle of Energy Conservation to Modeling the PWM Converters," 2nd IEEE Conference on Control Applications, Vancouver, Canada, September, 1993 (co-author D. Czarkowski).

"Frequency Characteristics of Ferrite Core Inductors," Conference of Electrical Manufacturing and Coil Winding, pp. 369-372, Chicago, IL, October, 1993 (co-authors M.K Jutty and V. Swaminathan). ➢

Junghsen Lieh (ME) published the following papers:

"The Effect of Bandwidth of Semiactive Dampers on Vehicle Ride," **ASME Journal of Dynamic Systems, Measurement and Control,** Vol. 115, pp. 571-575, Sept. 1993.

"Semiactive Damping Control of Vibrations in Automobile," **ASME Journal of Vibration and Acoustics,** Vol. 115, pp. 340-343, July, 1993.

"Optimal Velocity Control of Vehicle Ride," 13th IAVSD Symposium on Dynamics of Vehicles on Roads and Tracks, pp. 27-30, China, August, 1993. ➢

Giorgio McBeath, Assistant Dean, received the award for the "Best Video and Program Overview" at the October 1993 Directors Meeting. The award was presented at the 3rd Annual U.S. Department of Energy (DOE) Pre-Freshman Enrichment Program (PREP) in Washington, D.C. Dr. McBeath is the director of the WRIGHT STEPP Program, which is Ohio's only Department of Energy funded PREP Program in 1993-1994.

Dr. McBeath also made a presentation on "Math Proficiency Level (MPL) and Learning Style Inventory (LSI) as Predictors of Undergraduate Engineering Retention," at this meeting. ➢

William S. McCormick (EE) had a paper entitled, "Resolution of a 2Π Ambiguity Problem in Multiple Frequency Spectual Estimation," accepted for publication in the IEEE Transactions on Aerospace and Electronic Systems. ➢

David Reynolds (BHE) and **Divesh Mahajan (Graduate Student, BHE)** presented a paper entitled, "Fuzzy Control of an Electrical Muscle Stimulation/Reciprocating Gait Orthosis System for Spinal Cord Injured," at the 1993 annual fall meeting of the Biomedical Engineering Society held in Memphis, Tennessee. Kuldip S. Rattan (EE) and Chandler A. Phillips (BHE) were co-authors of this paper. ➢

Krishneprasad Thirunarayan (CSE) published "Locality in Inheritance Networks," in Information Processing Letters, Vol. 46(6), pp. 263-268, July, 1993. ➢

Nong Ye (BHE) presented and published a paper entitled: "Introducing Problem Solving Strategies of Uses into the Interface Design," in Proceedings of the 5th International Conference on Human-Computer Interaction, Orlando, Florida, pp. 873-878. She also chaired a session at this same conference.

Dr. Ye also published "Neural-Networks-Aided Fault Diagnosis in Supervisory Control of Advanced Manufacturing Systems," in the **International Journal of Advanced Manufacturing Technology**, Vol. 8, pp. 200-201. ➢

NATIONAL PHYSICAL SCIENCE CONSORTIUM

The NPSC is sponsoring a graduate fellowship program for minorities and women in the physical sciences.

Application deadline is November 15, 1993, so interested applicants must **HURRY and STOP** at 405 RC for information and application material.

GEM FELLOWSHIP PROGRAMS

National Consortium for Graduate Degrees for Minorities in Engineering and Science, Inc. (GEM). Applications and fellowship materials for M.S. and Ph.D. engineering degrees are available in the collage office, 405 RC. Application deadline is December 1, 1993.

SCHOLARSHIPS and FELLOWSHIPS

NATIONAL ACADEMY FOR NUCLEAR TRAINING

The National Academy for Nuclear Training awards scholarships to college students who have demonstrated outstanding academic achievement and who are interested in pursuing careers in the U.S. nuclear power industry.

For the upcoming year, 250 new and renewed Academy Scholarships of $2,250 each will be awarded on the basis of merit to college sophomores, juniors, and seniors.

Students who have achieved a minimum academic standing of 3.0 GPA and are majoring in nuclear engineering, power generation health physics, or mechanical, electrical, or chemical engineering (with nuclear or power options) are eligible for consideration.

For application information contact the college office, 405 RC.
Application deadline: February 1, 1994.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME) and the SOCIETY OF AUTOMOTIVE ENGINEERS (SAE) are both sponsors of Washington Internships for Students in Engineering (WISE)

ASME and SAE are again sponsoring students for participation in the 1994 Washington Internships for Students of Engineering (WISE) program.

The WISE program offers an opportunity for outstanding undergraduate scholars and potential leaders to learn about the relationship between engineering and public policy.

During ten weeks in the summer, the WISE students meet with prominent engineers and government officials in Washington, DC, examine public policy issue of concern to engineering, and prepare a research paper.

For application information contact:

WISE
Attn: Betsy Houston
1899 L St. NW, Suite 500
Washington, DC 20036
202/466-8744
FAX 202/833-3014

Application deadline: December 10, 1993.

OHIO ASSOCIATION OF CONSULTING ENGINEERS

This program includes scholarships awarded by the American Consulting Engineers Council Member Organization (MO). To qualify, a student must be a U.S. citizen pursuing a bachelor's degree in an ABET-approved engineering program or in an accredited land surveying program. Students must be entering their junior, senior or fifth year, in the fall of 1994 to qualify. Students graduating in December 1994 are not eligible.

Application information may be obtained in the college office, 405 RC.
Application deadline: February 11, 1994.

NATIONAL DESIGN GRAPHICS COMPETITION

Sponsored by the American Society for Engineering Education, this event will be held in conjunction with the 1994 ASEE Convention, June 26-29, 1994, at Edmonton, Alberta, Canada.

The purpose of this event is to emphasize the importance of the design process early in the career of new engineering students. For this reason, the competition is open only to freshman students.

The competition is directed toward the solution of one specific design problem (design a device to open a medicine bottle that has a child-proof top). It is hoped that this project will focus attention on the design of a product that is genuinely needed.

Contact the college office, 405 RC for application information.

Application deadline: February 1, 1994.

BF GOODRICH COLLEGIATE INVENTORS PROGRAM

This is a national competition designed to encourage college students active in science, technology and creative invention, while stimulating their problem-solving abilities. This competition recognizes the working relationship between a student and his or her advisor who are involved in projects leading to inventions that can be patented.

Full-time college or university students are eligible to participate. An information packet is available in the college office, room 405 RC.
Application deadline: February 15, 1994

FORD FOUNDATION POSTDOCTORAL FELLOWSHIPS FOR MINORITIES.

Open to U.S. citizens who are members of the following minority groups: Alaskan Natives (Eskimo or Aleut), American Indians, Black/African Americans, Mexican Americans/Chicanos, Native Pacific Islanders (Polynesian or Micronesian), and Puerto Ricans.

Applicants are required to have earned the Ph.D. or Sc.D. degree by January 7, 1994, and must have held the degree for not more than seven years as of that date.

Only those individuals already engaged in a teaching and research career or those planning such a career are eligible to apply.

For more information contact:

National Research Council
Office of Scientific and Engineering Personnel
2101 Constitution Avenue
Washington, D.C. 20418

Continued → → → → → →

NATIONAL CONFERENCE ON UNDERGRADUATE RESEARCH

Call for Presenters

The 8th National Conference on Undergraduate Research (NCUR) will bring together undergraduates involved in scholarly and artistic activities throughout the United States, representing a range of disciplines including business, creative arts, education, engineering, humanities, mathematics, performing arts, science, and social science as well as other academic disciplines. Representatives will attend from over 200 colleges and universities and from almost every state in the nation.

Since the first conference in 1987, the NCUR has become a major annual event that draws more than 1,200 undergraduates and 400 advisors and administrators to hear and discuss undergraduate creative and scholarly work by means of: oral presentations, poster presentations, artistic performances, exhibits. In addition, there is an opportunity to hear prominent researchers and leaders from academic, corporate, and government environments.

Undergraduate students are invited to give formal presentations or displays of original research, scholarly activities, or creative endeavors in all academic areas.

Conference Dates: April 14–16, 1994.

At: Western Michigan University, Kalamazoo, MI

Deadline to submit abstracts: March 15, 1994.

Information may be obtained from Department Chairs or the college office, room 405 RC.

WSU 1994-95 GRADUATE ACADEMIC AND MINORITY FELLOWSHIP PROGRAM

The School of Graduate Studies is accepting applications for the 1994-95 Graduate Academic and Minority Fellowship Program.

This program, through the Student Affairs Committee of the Graduate Council, awards fellowships to selected full-time and part-time students. The number of fellows selected is dependent upon the amount of monies annually allocated for the program. For 1993-94, the awards were $3,855 each for full-time fellows and $1,400 each for part-time fellows.

GPA standards for academic and minority fellowship applicants are: Incoming graduate students must have achieved at least a 3.2 cumulative GPA at their undergraduate institution(s); continuing graduate students must have a cumulative graduate GPA of at least 3.4. Finally, any students who will receive graduate assistantships, or who have been awarded another university-funded fellowship, will not be eligible to receive graduate academic or minority fellowships during the same period. Also, employees of Wright State University are not eligible for the program.

Academic and Minority Fellowship applications, information, and materials can be obtained from the School of Graduate Studies. If you have any questions, or if you need additional information, please do not hesitate to contact either Jerry Malicki or John Kimble in the Graduate School, 106 Oelman, extension 2976.

Deadline is January 10, 1994.

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS, INC.

GRANT-IN-AID for Graduate Students

A Grant-in-Aid is a grant of funds to a full-time graduate student of ASHRAE-related technologies. It is awarded once each year for use in the following academic year. The selection process occurs during the winter preceding the year of receipt of the grant.

The Grant is intended to encourage the student to continue his preparation for service in the HVAC&R industry. The relevance of the research proposed by the candidate is a consideration for awarding the grant.

The Grant-in-Aid is made to the university solely for the support of the student in an amount not to exceed $7,500 per calendar year per student and is not renewable.

GRANT-IN-AID for Undergrad. Students

A Grant-in-Aid is a grant of funds to a full-time engineering student in the final two years of undergraduate study. The funding is not to exceed $2,500 per calendar year per student and is not renewable. The faculty advisor of each grant recipient will receive $500 for project support or salary supplement. Students must have a GPA of 3.25/4.00, or above.

Application forms may be obtained from:

Manager of Research
ASHRAE
1791 Tullie Circle, NE
Atlanta, GA 30329

Application deadline: December 15, 1993.

PALACE KNIGHT PROGRAM

The U.S. Air Force needs Ph.D.'s and will pay salary plus tuition for scientists and engineers interested in pursuing Ph.D. studies.

In an effort to increase the number of civilian Ph.D.'s to staff its laboratories, the United States Air Force has implemented an exceptional employment program called PALACE KNIGHT. Selectees enter the program as civilian employees of the Air Force with full benefits and salary. Tuition, books, applicable fees, and travel allowances will be paid by the Air Force.

This program is limited to U.S. citizens able to obtain security clearances. B.S. selectees should be within six months of graduation, have applied or been accepted to an accredited university, a 3.25 overall cumulative GPA is desired along with a combined GRE score (verbal and quantitative) of 1000 or more. Consideration will also be given to students who have completed or are currently pursuing M.S. studies as well as current Ph.D. students.

Work experience will be obtained in a laboratory environment. Positions in other related technical fields may also be available.

Applicants must have the necessary academic qualifications to be accepted to a highly recognized university for Ph.D. studies. For further information or an application package contact:

Dr. Paul Hadorn
Wright Laboratory
Electronic Warfare Divisio
WL/AAWP, Hangar 4
W-PAFB, Ohio 4543
513/255-612

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AMELIA EARHART FELLOWSHIP AWARDS FOR WOMEN

These scholarships are offered by Zonta International Foundation for women pursuing graduate study in aerospace-related sciences and aerospace-related engineering during the 1994--95 academic year. It is anticipated that 33-35 grants in the amount of $6,000 each will be awarded.

Women applying must meet the following requirements:

1. B.S. in a qualifying area of science or engineering which is closely related to advanced studies in the aerospace-related sciences.
2. A superior academic record and evidence of potential at a recognized institution of higher learning as demonstrated by transcripts, recommendations and acceptance or verification by an institution of higher learning with accredited courses in aerospace related studies.
3. Completion of one year of graduate school at a well recognized institution of higher learning or evidence of a well defined research and development program as demonstrated by publications or a senior research project.

Candidates are evaluated by a committee of Zonta educators and scientists. Applications and recommendations must be postmarked by December 1, 1993 and received by December 7, 1993. For further information or applications, contact:

Zonta International Foundation
557 West Randolph Street
Chicago, Illinois 60661-2206
Telephone: 312/930-5848
Fax: 312/930-0951

NATIONAL DEFENSE SCIENCE AND ENGINEERING GRADUATE FELLOWSHIPS

As a means of increasing the number of U.S. citizens trained in disciplines of science and engineering of military importance, the Department of Defense plans to award approximately 90 new three-year graduate fellowships in April 1994.

National Defense Science and Engineering Graduate Fellowships will be awarded for study and research leading to doctoral degrees in, or closely related to, the following disciplines:

- Aeronautical and Astronautical Engineering
- Biosciences
- Chemical Engineering
- Chemistry
- Cognitive, Neural, and Behavioral Science
- Computer Science
- Electrical Engineering
- Geosciences
- Manufacturing Sciences and Engineering
- Materials Science and Engineering
- Mathematics
- Mechanical Engineering
- Naval Architecture and Ocean Engineering
- Oceanography
- Physics

Stipends for 1994-95 amount to $16,000. Full tuition and required fees are also paid.

Recipients of these fellowships do not incur any military or other service obligation.

To request a copy of the application materials contact Battelle at the following address:

NDSEG Fellowship Program
200 Park Drive, Suite 211
P.O. Box 13444
Research Triangle Park, NC 27709-3444
Attn: Dr. George Outterson
919/549-8505

Application deadline: January 19, 1994

NEW LEADERS SCHOLARSHIP PROGRAM

Computer Associates International's New Leaders Scholarship program provides financial support to outstanding undergraduate students in computer science or related engineering fields.

Sophomores and juniors from 50 colleges and universities throughout the country are eligible to apply. The computer science chairperson of each participating school may nominate his/her three most promising students.

Each year, ten finalists receive $5,000 scholarships along with PC's and CA software packages. Twenty semi-finalists will also receive the PC's and software. Recipients are selected based on transcripts department chair's letters of recommendation and essays describing the applicant's career goals and ideas about the future of technology.

Each finalist is guaranteed an internship with Computer Associates, the software industry's largest independent company. For more information contact Computer Associates International, Inc., One Computer Associates Plaza, Islandia, NY 11788-7000, phone 516/342-5224, 1-800/MICRO90, FAX 342-6868.

TEFLON INNOVATION AWARDS

The DuPont 1994 Plunkett Students Awards for Innovation with Teflon will award prizes worth $30,000 to the best examples of student innovation in fluoropolymer technology. The competition is names for Dr. Roy J. Plunkett, the DuPont scientist who discovered "Teflon."

DuPont is offering a summer internship in the company's fluoropolyme area–valued at approximately $10,000 or $3,000 in cash to the first place winner. The second and third place winners get cash awards of $2,000 and $1,000, respectively. Scholarships will be given to the schools of the top three prize winners, cash honorariums to the winners' faculty sponsors, and cash awards to the 10 honorable mention winners.

Full-time students, working individually or in teams, are eligible to enter. The competition is open to juniors, seniors and graduate students. Faculty sponsorship is required. The entry deadline is January 14, 1994. For information and entry forms, contact The DuPont Plunkett Student Awards, Suite 585, 400 North Capitol Street, N.W., Washington, DC, 10001, 1-800/432-7536.

MINORITY AID INFORMATION

The college office has a listing of financia aid available to minority students pursuing engineering degrees. You may see this list by stopping in room 405 RC.

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OAI Ohio Aerospace Institute Undergraduate Scholarship Announcement

The Ohio Space Grant Consortium, located at the Ohio Aerospace Institute, supports graduate fellowships, undergraduate scholarships and collaborative educational and research activities. To encourage U.S. citizens to pursue aerospace-related advanced education, the Consortium provides financial support through graduate fellowships and undergraduate scholarships. These scholarships are funded by the National Aeronautics and Space Administration (NASA) through its Space Grant College and Fellowship Program. Matching funds are provided by private industry and the Ohio Aerospace Institute.

Scholarships for full-time undergraduate students pursuing programs of study in aerospace-related engineering or science are a major component of the NASA Space Grant Program. Qualifying disciplines include:

Aeronautical Engineering
Aerospace Engineering
Applied or Engineering Physics
Chemical Engineering
Civil Engineering
Computer Engineering
Control Engineering
Electrical Engineering
Engineering Mechanics
Mechanical Engineering
Materials Science and Engineering
Systems Engineering

High School senior and undergraduate students who are, or expect to be enrolled in one of the following participating universities by the fall 1994 term are encourage to apply for a scholarship.

University of Akron
Case Western Reserve University
Central State University
University of Cincinnati
Cleveland State University
The University of Dayton
The Ohio State University
Ohio University
The University of Toledo
Wilberforce University
Wright State University

THE SCHOLARSHIP PROGRAM

NASA Space Grant/OAI Scholarships are competitively awarded. Students receiving a scholarship are expected to plan a program with a significant aerospace orientation with a faculty member at the scholar's university. Space Grant Scholarships are renewable for subsequent years provided program requirements continue to be met.

ELIGIBILITY

Scholarships are available to U.S. citizens enrolled at or applying to one of the participating universities. Members of under-represented groups, including women, minorities, and handicapped persons are particularly encouraged to apply.

TENURE

Scholarships begin in the fall of 1994 and are renewable annually. It is anticipated that the scholarship will be renewed until the student has completed a maximum of 8 academic semesters or 12 academic quarters from his/her initial enrollment at the university. The maximum tenure for a Space Grant Scholarship is four academic years or five calendar years. Scholarship funds are not paid during co-op periods.

It is the applicant's responsibility to obtain application materials and to request recommendations and transcripts in sufficient time to meet the application deadline. There will be no exceptions for late applications.

The complete application package must be postmarked no later than January 28, 1994.

Send to:
Space Grant Scholarship Program
c/o Ohio Aerospace Institute
22800 Cedar Point Road
Brook Park, Ohio 44142

For application information, contact Dr. Richard J. Bethke, 513/873-5040

FRESHMAN AND SOPHOMORE SCHOLARSHIP

To be considered for a NASA Space Grant/OAI Scholarship for the freshman or sophomore year, complete application package consisting of the following materials must be submitted no later than January 28, 1994:

- **Scholarship Application Form**
- **Official high school transcripts/and university transcript for current undergraduate freshmen.**
- **ACT and/or SAT scores (photocopy of official notice is acceptable)**
- **One page typewritten statement addressing applicant's aerospace interests, academic and career plans.**
- **Two recommendation forms, at least one being from a science/math teacher or faculty member in applicant's department.**

STIPEND

The scholarship for the freshman and sophomore years is an annual direct grant to the student in the total amount of $2,000. The annual scholarship is paid in two installments of $1,000 in September and January.

JUNIOR AND SENIOR SCHOLARSHIP

To be considered for a NASA Space Grant/OAI Scholarship for the junior or senior year, a complete application package consisting of the following materials must be submitted no later than January 28.

- **Scholarship application form**
- **Official college transcripts**
- **ACT and/or SAT scores**

(photocopy of official notice is acceptable)

- **One page typewritten Project Proposal for an aerospace-related research project to be completed during the scholarship year. The proposal should include discussion of project goals and must be endorsed by the sponsoring faculty member. The Project Proposal will be a major factor in the selection process.**
- **Two Recommendation Forms, at least one being from a faculty member in applicant's department.**

STIPEND

Juniors and seniors awarded scholarships will be paid $1,000 per quarter or $1,500 per semester, to a maximum of $6,000 for the combined junior and senior years, for participation in the proposed aerospace-related research project under the direction of the sponsoring faculty member. Stipends are not paid during co-op periods.

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OAI Ohio Aerospace Institute Graduate Fellowship Announcement

To encourage U.S. citizens to pursue full-time graduate study in aerospace-related engineering and science, the Ohio Space Grant Consortium, located at the Ohio Aerospace Institute, offers graduate fellowships to students who have demonstrated ability and aptitude for advanced study in these areas. Fellowships are funded by the National Aeronautics and Space Administration (NASA) through its Space Grant College and Fellowship Program and by NASA Lewis Research Center. Matching funds are provided by private industry and the Ohio Aerospace Institute. Fellowships are competitively awarded to students in master's and doctoral programs at the following participating universities.

University of Akron • Case Western Reserve University • University of Cincinnati
Cleveland State University • The University of Dayton • The Ohio State University
Ohio University • The University of Toledo
Wright State University

Disciplines appropriate to this program include:

Aerospace Engineering • Aeronautical Engineering • Chemical Engineering
Civil Engineering • Computer Engineering • Control Engineering
Electrical Engineering • Engineering Mechanics • Materials Science and Engineering
Mechanical Engineering • Systems Engineering

Research Areas of Interest:

Aeronautical Applications • Aeropropulsion
Computational Fluid Dynamics • Computational Sciences
Electronics and Communications • Materials Space Propulsion
Space Power • Space Science

THE MASTER'S FELLOWSHIP

NASA Space Grant/OAI Master's Fellowships are available to U.S. citizens who will begin graduate study in an aerospace-related discipline in the fall of 1994. Applicants must have applied to the graduate school of one of the participating universities. Members of underrepresented groups, including women, minorities, and handicapped persons are particularly encouraged to apply.

STIPEND

The stipend for the Master's Fellowship is $10,000 per nine-month academic year. Stipends are prorated and paid monthly by the Fellow's university. It is anticipated that support for tuition and fees will be provided by the participating university.

TENURE

Masters fellowships begin in the fall of 1994 and have a maximum tenure of eighteen months. Continuation of the fellowship for the second year will be based upon advisor's recommendation and satisfactory progress toward the Master's degree.

APPLICATION

To be considered for the 1994 Master's Fellowship Program, a complete application package containing the following materials must be submitted no later than January 28, 1994:

- **Graduate Fellowship Application Form**
- **Official transcripts of all undergraduate and graduate work**
- **Two recommendation forms, one of which must be from the applicant's academic advisor**

It is the applicant's responsibility to obtain application materials and to request recommendations and transcripts in sufficient time to meet the application deadline. There will be no exceptions for late applications. The complete application package must be postmarked no later than January 28, 1994.

Send to:

Space Grant Fellowship Program
c/o Ohio Aerospace Institute
22800 Cedar Point Road
Brook Park, Ohio 44142

THE DOCTORAL FELLOWSHIP

NASA Space Grant/OAI Doctoral Fellowships are available to U.S. citizens enrolled in a doctoral program in an aerospace-related discipline at one of the participating universities. Preference will be given to applicants beginning their doctoral program in the fall of 1994. Members of underrepresented groups, including women, minorities, and handicapped persons are particularly encouraged to apply.

ON-SITE REQUIREMENT

Recipients of a Doctoral Fellowship are required to conduct a significant portion of their doctoral research in residence at NASA Lewis Research Center/OAI.

STUDENT STIPEND

The student stipend for the Doctoral Fellowship is $15,000 per year, increasing to $17,000 during the period of residence at OAI. The stipend is prorated and paid monthly by the Fellow's university. It is anticipated that support for tuition and fees will be provided by the participating university.

TENURE

Fellowships begin in the fall of 1994. Doctoral Fellowships have a maximum tenure of three years. Continuation of the fellowship after the first year will be based upon advisor's recommendation, satisfactory progress toward the Doctoral degree, and the development of plans for the on-site component of the program.

APPLICATION

In order to be considered for the 1994 Doctoral Fellowship Program, a complete application package consisting of the following materials must be submitted no later than January 28, 1994:

- **Graduate Fellowship Application Form**
- **Official transcripts of all undergraduate and graduate work**
- **Two recommendation forms, one of which must be from the applicant's academic advisor**

For application information, contact Dr. Richard J. Bethke, 513/873-5040

November 1993

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	Co-op Awareness 3-4 pm 144 RC 3	4	Last day for freshmen to drop a class with a grade of "W" 5	Junior winter registration begins 6
7	8	9	10	Veterans Day No classes Offices closed  11	12	Sophomore winter registration begins 13
14	Graduate Open House RC Lobby 5-7 pm 15	Spring class schedules due 16	17	18	Deadline to Register for Ring Ceremony 19	College Open House 10 am-1 pm RC Lobby 20
21	22	23	No classes 24	HAPPY THANKSGIVING No classes Offices closed 25	No classes Offices closed 26	No classes 27
28	Final Exams 29	Final Exams 30				

December 1993

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			Final Exams 1	Final Exams 2	Final Exams Order of the Engineer Ring Ceremony 7:00 pm – RC 3	COMMENCE-MENT Congratulations 4
5	6	Last day to apply for March graduation 7	8	9	10	College Open House 11 am-2 pm RC Lobby 11
12	13	14	15	16	17	18
19	20	21	22	Offices closed 23	Offices closed 24	Happy Holiday  25
26	27	28	College Open House RC Lobby 3-5 pm 29	30	Offices closed 31	

ATTENTION HIGH SCHOOL STUDENTS

The National Engineering Aptitude Search (NEAS) is a guidance-oriented examination which evaluates a student's aptitude for a career in engineering, science, or mathematics and provides information on how to prepare for further high school or college study. Tests are scheduled at WSU on Saturday, January 29, 1994 and Saturday, March 12, 1994 9 a.m. – Noon. For registration information call 513/873-5001.

Russ Engineering Center Open House Tours

- **Learn about our engineering and computer science programs**
- **Tour our new facilities and laboratories**
- **Meet faculty and students**
- **Receive information about our student clubs and college activities**

OPEN HOUSE TOUR DATES –Call 513/873-5001 to Register

SATURDAY, NOVEMBER 20, 1993	**10:00 a.m. – 1:00 p.m.**
SATURDAY, DECEMBER 11, 1993	**11:00 a.m. – 2:00 p.m.**
WEDNESDAY, DECEMBER 29, 1993	**3:00 – 5:00 p.m.**
SATURDAY, JANUARY 22, 1994	**11:00 a.m. – 2:00 p.m.**
MONDAY, FEBRUARY 21, 1994	**2:00 p.m. – 7:00 p.m.**

The College of Engineering and Computer Science welcomes inquiries from prospective high school students. For information about our engineering and computer science programs, or to arrange for a tour of the Russ Engineering Center, call Dick Rathbun, Assistant Dean, 513/873-5001.

Wright State University
College of Engineering and Computer Science
Dayton, Ohio 45435

Office of the Dean